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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,527	07/24/2003	Yoshinori Yoshida	Q76642	8152
23373 7590 12/23/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
DESAL, ANISH P				
ART UNIT		PAPER NUMBER		
1788				
NOTIFICATION DATE		DELIVERY MODE		
12/23/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/625,527

**Applicant(s)**

YOSHIDA ET AL

**Examiner**

ANISH DESAI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4, 6-8, 10 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6-8, 10 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 05/10/10
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

1. Applicant's arguments in response to the Office action (OA) mailed on 05/13/10 have been fully considered. Support for amended claims is found in the specification as indicated by applicant in the response, and in claim 4. Further, support for new claim 22 is found in Figure 2A.
2. Objection to claims 6 and 7 is withdrawn in view of applicant's amendment and response. However, a new claim objection to claims 8 and 10 is made in view of applicant's amendment to independent claim 1.
3. The 112-first paragraph rejections are maintained.
4. In view of applicant's amendment and response, the 103(a) rejections based on Nagamoto et al. (US 6,156,423) in view of Ebe et al. (JP 62-153376) are withdrawn, because Nagamoto does not teach or suggest the first film having a thickness of 50  $\mu\text{m}$  to 200  $\mu\text{m}$  and "wherein an acrylic monomer to form the acrylic polymer includes monomers having carboxyl groups and/or monomers having hydroxyl groups" as claimed. Further, Nagamoto does not teach or suggest "a composite film comprising a composition containing a urethane polymer and acrylic polymer, wherein the urethane polymer and an acrylic polymer are bonded together"
5. In view of applicant's amendment, a new 102(b) rejection based on Ochi et al. (US 5,225,267) is made.

***Information Disclosure Statement***

6. The information disclosure statement filed on 05/10/2010 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. A copy of JP 09-253964 is not provided.

***Claim Objections***

7. Claims 8 and 10 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 8 and 10 depend from claim 1, wherein claim 1 recites a first film having a thickness of 50  $\mu\text{m}$  to 200  $\mu\text{m}$ . Claims 8 and 10 recite thickness of the first film in the range of 10  $\mu\text{m}$  or more and 200  $\mu\text{m}$  or less. As such, claims 8 and 10 fail to further limit the subject matter of parent claim 1.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claims 1, 2, 4, 6-8, 10, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

9. Claim 1 recites "wherein the urethane polymer and an acrylic polymer are bonded together". Specification as originally filed fails to provide support to broadly recite that the urethane polymer and acrylic polymer are bonded together. As noted by the Examiner on page 2, section 4 of the Advisory Action mailed on 03/24/10, while there may be a support for a ***specific*** urethane polymer and ***specific*** acrylic polymer that can be bonded together and for specific type of polymer, namely urethane/acrylic block copolymer, which possesses ***specific type of bonding***, i.e. covalent bonding (see page 21 lines 10-15 of specification), there does not appear to be a support in the

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specification to broadly claim that **any** urethane polymer and **any** acrylic polymer are bonded together.

10. Applicant has argued that "Applicant amends claim 1 to clarify this aspect [i.e. urethane polymer and acrylic polymer are bonded together] of the invention" (see page 5 of 10/13/10 amendment), but the Examiner notes that claim 1 is not amended to clarify this aspect. Further, as to applicant's assertion that "In the present invention, the urethane polymer and the acrylic polymer of this invention can be bonded together by performing a reaction of carboxylic groups or...This reaction is understood by one of ordinary skill in the art..." (see pages 5-6 of 10/13/10 amendment), the Examiner respectfully submits that this is not found persuasive given that the issue at present is not whether the aforementioned assertion is understood by one of skill in the art; instead whether there is support to broadly recite "wherein the urethane polymer and an acrylic polymer are bonded together". Accordingly, the Examiner respectfully disagrees with applicant's arguments.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**11. Claims 1, 2, 6-8, 10, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ochi et al. (US 5,225,267).**

12. Regarding claim 1, Ochi teaches a laminated resin film comprising a PVC film (equated to applicant's first film of polyvinyl chloride resin), a thin layer of urethane resin layer which is formed of polyurethane resin graft polymerized with acrylic polymer (see abstract, column 11 lines 14-55, and column 12 lines 40-45) and a metal layer on the urethane resin layer (abstract and column 14 lines 10-15). The Examiner equates polyurethane resin layer and the metal layer of Ochi collectively as "a composite film comprising composition containing a urethane polymer and acrylic polymer, wherein the urethane polymer and acrylic polymer are bonded together" as claimed. Further, Ochi discloses that a layer of PSA can be applied on a surface of the metal layer (column 16 lines 7-13). As such, Ochi discloses a PSA layer formed on the other side of the composite film.

13. Additionally regarding claim 1, the thickness of the first film (PVC film) of Ochi is generally 20 to 200  $\mu\text{m}$  (column 3 lines 10-17) and meets the thickness of the first film as claimed.

14. Further as to claim 1, the acrylic monomer to form the acrylic polymer in the invention of Ochi includes monomers having carboxyl group or monomers having

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hydroxyl groups (see column 11 lines 34-35 referring to acrylic acid and column 12 lines 5-10). Moreover, the urethane polymer in the invention of Ochi is formed of reaction between polyol and polyisocyanate (see column 10 lines 39-50).

15. Additionally, as to claimed properties of the modulus of the PSA sheet (claims 1 and 2), storage modulus of the composite film (claim 6), and the storage modulus of the first film (claim 7), given that the PSA sheets including the composite film and the first film of applicant as claimed and that of Ochi as set forth above are formed of same structure and composition, the aforementioned properties would intrinsically be present in the PSA sheet of Ochi.

16. As to claims 8 and 10, it is noted that the first film (PVC film) and the metal layer/polyurethane/acrylic resin film (composite film) of Ochi has thickness of 20 to 200  $\mu\text{m}$  (column 3 lines 10-17) and 1 to 30  $\mu\text{m}$  (column 13 lines 43-46) respectively. As such, Ochi meets claimed thickness and the ratio of thicknesses (e.g.  $200\ \mu\text{m} / 30\ \mu\text{m} = 7$  which is within 0.1 to 10). Note that the metal layer of Ochi has thickness as low as 50 Angstrom (see column 14 line 15) which converts to 0.005  $\mu\text{m}$  and as such it does not add much to the thickness of the resultant composite film. Therefore, the thickness of the metal film is not included in the thickness calculation of the composite film (i.e. only urethane resin film thickness is used).



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17. As to claim 22, given that the PSA layer of Ochi is formed on the metal layer (column 16 lines 7-12) of the composite film (i.e. metal coated urethane resin layer), it is clear that the PSA of Ochi touches the composite film.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ochi et al. (US 5,225,267).**

19. As to claim 4 limitation "...composite film comprises a film obtained by reacting a polyol and a polyisocyanate in a acrylic monomer to form the urethane polymer, coating a mixture of the urethane polymer and the acrylic monomer on the first film and

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irradiating a radiation onto the coating to cure it.", this limitation is a product by process limitation.

20. Product by process claim is not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

21. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). In the instant case the composite film of Ochi as set forth previously and that of applicant comprise urethane polymer and acrylic polymer bonded together. As such, there is no difference between the structure of the composite film as obtained from the process of claim 4 and that of disclosed by Ochi.

### ***Response to Arguments***

22. Applicant's arguments received on 10/13/10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH DESAI whose telephone number is (571)272-6467. The examiner can normally be reached on Monday-Friday, 9:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. D./

Examiner, Art Unit 1788

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1787